**Listing of Claims:**

1. (Previously Presented) A method to inhibit allergen-induced airway hyperresponsiveness in a mammal, comprising administering to a mammal a calcitonin gene related peptide (CGRP);

wherein said mammal has allergen-induced airway hyperresponsiveness, and wherein administration of said CGRP inhibits allergen-induced airway hyperresponsiveness in said mammal as compared to in the absence of administration of said CGRP.

2. (Cancelled)

3. (Previously Presented) The method of Claim 1, wherein said mammal has been sensitized to an allergen and has been exposed to, or is at risk of being exposed to, an amount of said allergen that is sufficient to induce airway hyperresponsiveness (AHR) in said mammal in the absence of said CGRP.

4. (Previously Presented) The method of Claim 1, wherein said method further comprises monitoring said mammal to detect whether AHR in said mammal is inhibited, wherein if AHR is detected in said mammal, additional amounts of said CGRP are administered until AHR is not detected in said mammal.

5. (Previously Presented) The method of Claim 1, wherein said CGRP is administered within a time period of between 48 hours or less prior to exposure to an AHR provoking stimulus that is sufficient to induce AHR, and within 48 hours or less after the detection of the first symptoms of AHR.

6. (Previously Presented) The method of Claim 1, wherein said CGRP is administered upon the detection of the first symptoms of AHR.

7. (Previously Presented) The method of Claim 1, wherein said CGRP is administered within 1 hour after the detection of the first symptoms of AHR.

8. (Previously Presented) The method of Claim 1, wherein said CGRP is administered within 12 hours or less prior to exposure to a AHR provoking stimulus that is sufficient to induce AHR.

9. (Previously Presented) The method of Claim 1, wherein said CGRP is administered within 2 hours or less prior to exposure to an AHR provoking stimulus that is sufficient to induce AHR.

10. (Previously Presented) The method of Claim 1, wherein said CGRP is administered to said mammal every one to two days.

11. (Cancelled)

12. (Previously Presented) The method of Claim 1, wherein said CGRP is administered at a dose of from about 0.1μg x kilogram$^{-1}$ and about 20 μg x kilogram$^{-1}$ body weight of said mammal.

13. (Previously Presented) The method of Claim 1, wherein said CGRP is administered at a dose of from about 0.1 μg x kilogram$^{-1}$ and about 10 μg x kilogram$^{-1}$ body weight of said mammal.

14. (Previously Presented) The method of Claim 1, wherein said CGRP is administered at a dose of from about 0.1 μg x kilogram$^{-1}$ and about 5 μg x kilogram$^{-1}$ body weight of said mammal.

15-19. (Cancelled)

20. (Previously Presented) The method of Claim 1, wherein said CGRP is targeted to cells in the lung of said mammal selected from the group consisting of smooth muscle cells and epithelial cells.

21. (Previously Presented) The method of Claim 1, wherein said CGRP is administered by direct delivery of said CGRP to the lung of said mammal.

22. (Previously Presented) The method of Claim 1, wherein said CGRP is administered by aerosol delivery.

23. (Previously Presented) The method of Claim 1, wherein said CGRP is administered by parenteral delivery.

24. (Previously Presented) The method of Claim 1, wherein said CGRP is administered by oral delivery.

25. (Previously Presented) The method of Claim 1, wherein administration of said CGRP reduces the airway hyperresponsiveness of said mammal such that the $FEV_1$ value of said mammal is improved by at least about 5%.

26. (Previously Presented) The method of Claim 1, wherein administration of said CGRP prevents airway hyperresponsiveness in said mammal when administered prior to exposure of said mammal to an AHR provoking stimulus that is sufficient to induce AHR.

27. (Cancelled)

28. (Cancelled)

29. (Previously Presented) The method of Claim 1, wherein said CGRP is administered in a pharmaceutically acceptable excipient.

30. (Original) The method of Claim 1, wherein said mammal is a human.

31-42. (Cancelled)

43. (Previously Presented) The method of Claim 1, wherein administration of said CGRP inhibits allergen-induced airway hyperresponsiveness in said mammal with statistical significance ($p<0.05$) as compared to in the absence of administration of said CGRP.

44. (Previously Presented) The method of Claim 1, wherein the CGRP is human αCGRP.

45. (Cancelled)

46. (Previously Presented) A method to inhibit allergen-induced airway hyperresponsiveness in a mammal, comprising administering to a mammal a calcitonin gene related peptide (CGRP);

wherein said mammal has allergen-induced airway hyperresponsiveness in response to a concentration of methacholine that causes a 20% fall in $FEV_1$ ($PC_{20}FEV_1$), wherein said concentration is less than the concentration required to cause a 20% fall in $FEV_1$ ($PC_{20}FEV_1$) in non-allergen-sensitized mammals; and

wherein administration of said CGRP inhibits allergen-induced airway hyperresponsiveness induced by said concentration of methacholine in said mammal as compared to in the absence of administration of said CGRP.

47. (Cancelled)